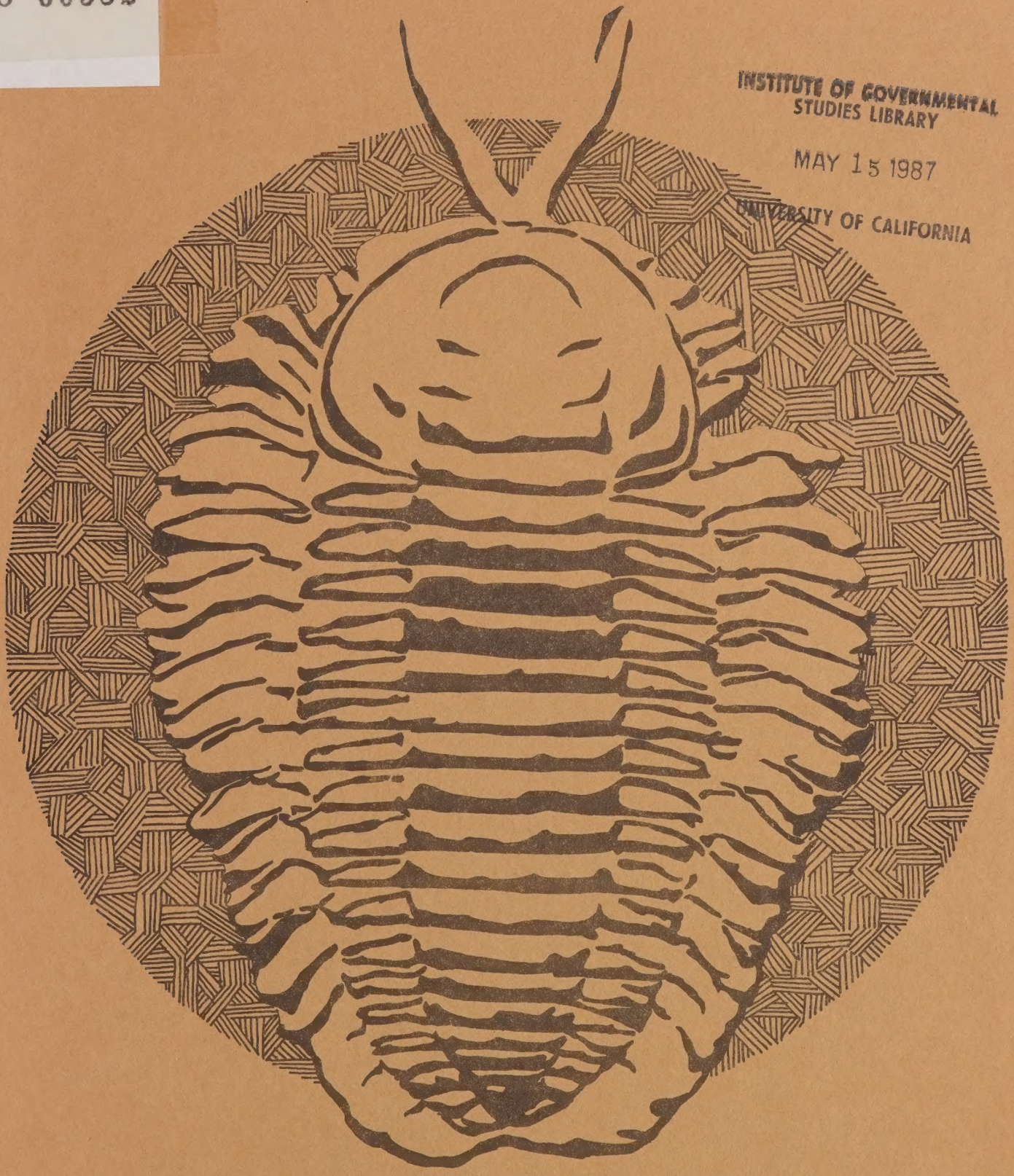

Conservation of Natural Resources Element

NEWPORT BEACH GENERAL PLAN

CONSERVATION OF NATURAL RESOURCES ELEMENT OF THE NEWPORT BEACH GENERAL PLAN

ADOPTED AND RECOMMENDED FOR APPROVAL
BY THE PLANNING COMMISSION
NOVEMBER 29, 1973

ADOPTED BY CITY COUNCIL
JANUARY 14, 1974

RESOLUTION NO. 8174

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF NEWPORT BEACH ADOPTING THE CONSERVATION OF NATURAL RESOURCES ELEMENT OF THE NEWPORT BEACH GENERAL PLAN

WHEREAS, a phase of the City's General Plan Program has involved the preparation of a Conservation of Natural Resources Element; and

WHEREAS, this Element sets forth objectives and supporting policies which will serve as a guide for the future planning and development of the City; and

WHEREAS, the Planning Commission of the City of Newport Beach, pursuant to Section 707 of the Newport Beach City Charter, has held a public hearing to consider the adoption of the Conservation of Natural Resources Element as a part of the City's General Plan and has adopted and has recommended that the City Council adopt said element; and

WHEREAS, the City Council has conducted a public hearing to consider the adoption of the Conservation of Natural Resources Element as a part of the City's General Plan.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Newport Beach does hereby adopt the Conservation of Natural Resources Element described above, a copy of which is on file in the office of the City Clerk.

ADOPTED this 14th day of January, 1974.

Donald A. McDonald
Mayor

ATTEST:

Laura Lagnion
City Clerk

RESOLUTION NO. 870

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF NEWPORT BEACH ADOPTING THE CONSERVATION OF NATURAL RESOURCES ELEMENT OF THE NEWPORT BEACH GENERAL PLAN

WHEREAS, a phase of the City's General Plan Program has involved the preparation of the Conservation of Natural Resources Element; and

WHEREAS, said Conservation of Natural Resources Element sets forth objectives and supporting policies which will serve as a guide for the future planning and development of the City; and

WHEREAS, pursuant to Section 707 of the City Charter of the City of Newport Beach, the Planning Commission has held public hearings to consider the adoption of the Conservation of Natural Resources Element of the Newport Beach General Plan.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission does hereby adopt and recommend to the City Council the Conservation of Natural Resources Element of the Newport Beach General Plan described above, a copy of which is on file in the Newport Beach Community Development Department.

Regularly passed and adopted by the Planning Commission of the City of Newport Beach held on the 29th day of November, 1973.

AYES: Agee, Beckley, Hazewinkel, Heather, Parker, Rosener, Seely

NOES: None

ABSENT: None

Chairman William Agee

Secretary Joseph Rosener, Jr.

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INTRODUCTION

The natural resources of Newport Beach include such a scope and variety that they alone account for much of the uniqueness and desirability of the community.

Ocean breezes nudge the shore. Waves touch the beaches in ever-changing strengths and patterns. Thousands of birds, compelled only by the seasons, soar above the striated bluffs and touch to feed in the bay and make it home.

Mastadon, sabre-tooth tiger, camel and bison once roamed the hills. Man, before the time of Christ, lived on the bluffs of this land. The story of time-forgotten man and beast is laid down within the earth.

Man remains today. He lives in Newport Beach, dependent upon the accoutrements of modern civilization, yet showered with a myriad of nature's gifts. Without the ocean breezes which blow away oppressive collections of smog and which cool the deepest summer heat; without the water which supports an astounding and mystifying circle of life and which provides man with many varied and delightful activities; without the grasslands and scrub which feed and hide wildlife communities and reach their roots into the soil; and, without the treasure trove of archaeological and paleontological sites which challenge the seeker to probe the puzzles of eons past; the City of Newport Beach would not be counted as "unique" in the Southern California Community. The citizens of Newport Beach are truly blessed by the physical environment, and that blessing itself weighs as a terrible responsibility. This City carries the obligation to protect the fragile treasures of life bestowed upon it.

PURPOSE AND SCOPE

The Conservation of Natural Resources Element includes:

1. a discussion of the existing natural resources in the City of Newport Beach and their current conditions;
2. the agencies involved in, and current programs for, the conservation of these resources, and
3. the actions which will be taken by the City of Newport Beach, or which the City will encourage other agencies to take, which will assure conservation of these natural resources.

It is intended that this Element satisfy the State requirement that local General Plans contain a "Conservation Element". Section 65302 of the Government Code states, in part, that the General Plan shall include:

> "A conservation element for the conservation, development, and utilization of natural resources, including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources."

The major natural resources in the City of Newport Beach include the bay and ocean waters, the beaches and the air. Oil deposits constitute the only significant natural mineral resource. There are known sites containing archaeological and paleontological resources of great significance in the City.

There are several natural land and wildlife areas in the City which should be considered natural resources. These natural

land and wildlife areas are proposed in the Recreation and Open Space Element to be retained as flora and fauna reserves.

The Conservation of Natural Resources Element is divided into six sections:

1. Bay and Ocean Water Quality
2. Air Quality
3. Beach Erosion Control
4. Mineral Resources
5. Archaeological and Paleontological Resources
6. Energy Conservation

SECTION 1 - BAY AND OCEAN WATER QUALITY

Introduction

This section of the Conservation of Natural Resources Element deals with the control of bay and ocean water quality.

The bay and ocean waters are the most significant natural resources within Newport Beach, having major geological, recreational, and economic importance to the City and the region. Control of pollution of these waters is imperative to the future quality of the Newport Beach living environment. Furthermore, control of pollution of these waters is necessary to the health and welfare of the many migratory birds who utilize our bay and beach areas and to the marine life which is nurtured here. The importance of Newport Bay in the Pacific Flyway as the major resting ground between Morro Bay and Mexico extends concern far beyond the City or even the region.

A City Council policy statement on Bay Water Quality Control, adopted December 21, 1970, and reaffirmed February 14, 1972, states:

> "The City Council is unalterably opposed to the discharge of any raw sewage, sewage effluent, litter, debris or other wastes into Newport Bay that in any possible way could cause pollution and contamination of the waters of Newport Bay.
>
> The Council further urges the County of Orange and any other public and private agencies to take all practical steps to reduce or eliminate sediment flows into Upper Newport Bay during rainy seasons."

Definition of Water Pollution

It is difficult to precisely define the term, "water pollution". Even without the influence of man, waters in their natural state will vary in their relative purity from area to area and place to place as a result of natural phenomena. The State Porter-Cologne Water Quality Control Act defines water pollution as follows:

> "'Pollution' means an alteration of the quality of the waters of the State by waste to a degree which unreasonably affects: (1) such waters for beneficial uses, or (2) facilities which serve such beneficial uses."

The term, "beneficial use", is a legal term referring to those uses of the waters established by the Regional Water Quality Control Boards. The Santa Ana Regional Water Quality Control Board's "Water Quality Control Policy for Coastal Bays, Marinas and Sloughs" established the following "beneficial uses" for Newport Bay: 1) water contact sports, 2) fishing, 3) propagation and sustenance of aquatic life, 4) boating, 5) aesthetic enjoyment, and 6) shellfish harvesting. Pollution, as defined by the Regional Water Quality Control Board, occurs when any change in the water adversely affects any of these uses in an unreasonable manner.

It is apparent that, from time to time, bay and ocean water conditions have changed in a manner to adversely affect one or more of these "beneficial uses", either due to natural or man-made causes. Whether or not these adverse effects were

"unreasonable" is a question subject to legal interpretation. However, swimming at public beaches has had to be prohibited due to polluted water (generally as the result of a sewerage spill), and at times floating debris obviously has interfered with aesthetic enjoyment. Not so apparent are the adverse effects of changes in the bay and ocean waters on fishing, propagation and sustenance of aquatic life, and shellfish harvesting. While there is considerable disagreement among scientific authorities about the source and effects of pollution and the relative quality of the bay and ocean waters today, there is general agreement that, in terms of the above "beneficial uses", water quality in some areas of Newport Bay has degraded in recent years.

Pollutants, Sources, and Effects

The following chart illustrates the apparent pollutants which have from time to time, entered the bay (and ocean) waters, their sources, and their apparent effects:

POLLUTANT	BASIC SOURCE	CONTRIBUTORS	ADVERSE EFFECTS
Coliforms (bacteriological)	Sewage, human and animal wastes, soil and vegetation	Surface runoff, boaters, swimmers, animals, and birds	Human health, indicates possible presence of pathogens
Nutrients	Fertilizer, garbage, sewage	Surface runoff from homes, farms, and boaters	Health of water--excessive nutrient leads to excessive algal growth in turn leading to other problems
Pesticides	Garden and farm sprays	Surface runoff from homes and farms	Health of water, marine life and wildlife

POLLUTANT	BASIC SOURCE	CONTRIBUTORS	ADVERSE EFFECTS
Detergents	Car washing, sewerage	Surface runoff from homes, sewerage	Health of water, aesthetics, excessive algal growth
Oils and Fuels	Boats, cars	Surface runoff from streets, direct from boat spills, running of boat engines	Aesthetics and damage to marine life
Debris/Trash	People	Surface runoff from uplands. People using waters and beaches, adjacent homes and businesses	Aesthetics
Sediment	Soils	Surface runoff from natural erosion and poor construction practices	Health of water, marine life
Trace Metals	Paints, motor vehicle fuels and emissions	Street runoff, boat hull scraping	Health of water, marine life, and wildlife

Obviously, some of the pollutants contribute more than others to the deterioration of bay and ocean water quality. Currently there is no definitive and comprehensive information on the total structure of the pollution problem in both qualitative and quantitative terms. Until such a study is conducted, it is very difficult to approach the complex problem of water pollution control in a comprehensive manner.

A recent study of the bay and ocean areas was conducted by Dr. Peter S. Dixon, under contract with the City of Newport Beach, as a portion of the report, "Ecological Survey of Aquatic and Terrestrial Resources," Dr. Peter S. Dixon and Gordon A. Marsh, July, 1973. This study identifies the locations and apparent sources of water pollution as observed in the field survey, and discusses the probable ramifications

of this pollution. Several areas of concern were noted, including: 1) the quantity of suspended solids (silt) entering the bay from the San Diego Creek, the Santa Ana-Delhi Ditch, and local runoff; 2) the quantity of nutrients entering the bay from the same sources as above, from boats, and from birds and animals; 3) the quantity of petroleum products from street runoff and boats; 4) herbicides and pesticides from farms and homes; 5) heavy metals from both bottom paint and boat maintenance operations; 6) floating trash conveyed in flood control channels and storm drains, vegetative material from the Upper Bay, local runoff, and users of the bay and ocean waters and beaches; 7) low dissolved-oxygen concentrations in areas of the bay with poor flushing characteristics, as a result of excess nutrients and bacterial breakdown of plant or animal debris, and films of petroleum products on the surface of the water; and 8) bacteriological concentrations which may be hazardous to human health. (Refer to this report for a detailed discussion of these items.)

As can be seen from the above discussion, water pollution can result from both natural phenomena and the actions of man; however, it is apparent that man is the major source of water pollutants entering the waters of Newport Bay and the ocean. These "actions of man" sources can be divided into two categories: 1) private sector actions (by individuals and corporations), and 2) public sector actions (by governmental agencies). Often these two categories of actions may jointly contribute to water pollution, as in the case of governmental agencies approving private developments which result in, for example, increased siltation being washed from the watershed into the Bay.

Agencies Involved in Water Quality Control

There are several governmental agencies involved in the control of

bay and ocean water quality, including the City of Newport Beach. The City has a role to play in both categories of water quality control; i.e., in terms of private sector actions, the City has the responsibility to regulate individual or corporate actions within the City which may adversely affect water quality; in terms of the public sector, the City has the responsibility for assuring that its public actions, such as public works projects, are sensitive to the quality of the bay and ocean waters.

In addition to these direct roles, the City of Newport Beach may play an indirect role in influencing the public works projects and regulatory actions of other governmental agencies involved in water quality control within Newport Beach and the entire watershed area which drains into Newport Bay and the Pacific Ocean.

Several agencies, in addition to the City of Newport Beach, are involved in the control of water quality within the Newport Beach city limits. These agencies represent county, state, and federal levels of government.

The following chart illustrates the primary agencies involved in water quality control and their functions:

AGENCY	FUNCTIONS RELATED TO WATER POLLUTION CONTROL
City of Newport Beach	Development and enforcement of water pollution control regulations which apply to uses adjacent to the shoreline; development plan and environmental impact report review; litter removal from adjacent land areas; installation and maintenance of storm drains; ordinances prohibiting littering, dumping, or draining of materials which may find their way into the bay and their enforcement; and dredging (to a limited extent).
Orange County Harbors, Beaches, and Parks District	Development and enforcement of boat discharge and littering regulations, dredging of major channels (in conjunction with the Corps of Engineers), and litter and debris removal from harbor waters and county tidelands.
Orange County Health Department	Water quality monitoring of the Bay, special studies of tributaries, trace metal studies of the sediments, shellfish monitoring, review and evaluation of development plans, recommendations for water quality standards and objectives, enforcement of ocean water contact sports standards.
Orange County Flood Control District	Control of flood waters and resulting siltation and debris entering the bay and ocean, monitors stream flows, enforcement of the County's industrial waste disposal ordinance (covering unincorporated areas of the watershed).
California Regional Water Quality Control Board, Santa Ana Region	Administration of water quality control regulations (particularly waste discharges), development of regional water quality control plans, review of private development plans.
U. S. Army Corps of Engineers	Permit authority over dredging and other construction in navigable waters of the United States (extending to the line on shore reached by the mean of the higher high waters); construction of flood control and beach erosion control projects authorized by the Congress.

AGENCY	FUNCTIONS RELATED TO WATER POLLUTION CONTROL
Santa Ana Regional Watershed Planning Agency	Joint powers agency (among four water districts in the watershed) for watershed planning. Doing study of watershed, including Upper Bay, under contract with Environmental Protection Agency and State Water Resources Control Board. To result in recommendations for water conservation and pollution control.

In addition to these primary agencies, it must be recognized that all of the general purpose governmental agencies (the cities and Orange County) and many of the special district agencies within the watershed have an indirect effect on the bay and ocean water quality.

Current Water Quality Programs and Regulations

Following are the major water quality control programs involving the City of Newport Beach directly:

1. ENVIRONMENTAL QUALITY MONITORING PLAN FOR NEWPORT BAY - A plan for monitoring the water quality of the bay has been developed by a joint project team of the County Health Department; Flood Control District; Harbors, Beaches, and Parks Districts; and the City of Newport Beach. Approval of this plan by the Orange County Board of Supervisors and initiation of the monitoring program is anticipated in the near future. While there have been numerous studies of Newport Bay by various governmental and private agencies, this project will provide the first on-going, comprehensive monitoring study and will provide data which was hertofore unavailable, including: 1) quality of flows from tributaries on a monthly basis, 2) quality of bay waters on a quarterly basis, 3) benthic conditions (biota, chemistry, sediments), 4) hydraulics of the bay (currents, tidal range, and diffusion), and 5) waste discharges from boat yards.

2. WASTE DISCHARGE, HOLDING TANK, AND LITTERING ORDINANCES - Both the City and County have adopted ordinances which: 1) prohibit discharge of wastes into the water, 2) require holding tanks for all toilets on boats, 3) require pump-out facilities at marinas, 4) prohibit littering the waters or shoreline, and 5) require owners of marinas and piers to keep the area reasonably clear of debris.

3. CONTROL OF EROSION AND SILTATION - The Uniform Building Code as adopted by the City of Newport Beach includes provisions covering erosion control and the denuding of natural ground covers (which could result in sediments being washed into the bay).

Bay and Ocean Water Quality Proposals

A proposal for the restoration of Upper Newport Bay was recently developed by the "Friends of Newport Bay" citizens' group. This proposal involves the removal of excess silt which would enlarge the Upper Bay water area and increase the volume of water exchanged by tidal action, resulting in a major benefit to water quality and wildlife productivity. The removed silt would be used as fill material for the Corona del Mar Freeway, resulting in a major cost savings. The proposal has been enthusiastically endorsed by the Citizens' Environmental Quality Control Advisory Committee. As stated in the report prepared by this Committee.

> "At present Upper Newport Bay is heavily silted. It is by a gradual, but accelerating process, filling up. Restoration is ultimately required to preserve the bay, but this can be very costly. The proposal . . . can be achieved at a minimum cost and it is, in concept, versatile and non-destructive. An arrangement of mutual

benefit is proposed: Fill is needed for the construction of the freeway interchange at Palisades and MacArthur, which is now in the initial planning stages. The Highway Department carefully removes excessive silts and uses them for fill. We accomplish in turn an economical means to restore bay quality. In order not to create unworkable changes, the plan is in essence a return of the bay to the contours and channels which were present many years ago. The changes are proposed to occur over many years in line with anticipated needs of the Highway Department. This type of program is ideal from the environmental and community point of view since it allows us to proceed little by little, learning as we go. No changes are proposed which are irreversible."

On September 10, 1973, the City Council adopted Resolution No. 8098 which states:

"WHEREAS, the Upper Bay presently is heavily silted and its future viability in jeopardy because of present and projected silt levels; and

"WHEREAS, the State Department of Transportation requires fill which can be obtained from bay silt as part of a revitalizing program for the Upper Bay at potentially minimal cost to the County or City; and

"WHEREAS, a program designed to restructure the original contours and channels can be conceptualized which will protect and in fact improve the present life support system and water quality;

"NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Newport Beach support the concept of the restoration of Upper Newport Bay to its former viability that existed prior to the salt works, and will endeavor to cooperate with the County in removal of silts from certain areas of the Upper Bay in conjunction with the construction of the Corona del Mar freeway by the State Department of Transportation."

In view of the disagreement among authorities on pollution sources, levels, and solutions, and in view of the technical studies currently underway, it would be presumptuous and premature to propose more specific technical solutions or additional physical improvements within the context of this General Plan. However, there are several general governmental actions which will be undertaken in order to maintain and improve bay and ocean water quality:

1. In view of the regional nature of the bay water quality problem, the City will actively support the development of a coordinated, watershed-wide program (including legal regulations) for control of waste and sediment discharge and to intercept, to the extent possible, wastes and sediments upstream from the Upper Bay.

2. The City will encourage a scientific study (perhaps by U.C.I. as an educational study) which would identify the relative importance, on both a qualitative and quantitative basis, of each type of pollutant so that concerted effort can be made to control the most detrimental pollutants and their sources.

3. An in-depth study of all local drainage into the bay and ocean will be conducted identifying sources and contents with the participation of the Citizens' Environmental Quality Control Advisory Committee, and all current waste and sediment discharge regulations and enforcement programs will be closely examined. This study will be coordinated with the Health Department's water quality monitoring program. Where necessary, the stringency of the regulations and enforcement program will be increased.

4. A new grading ordinance, including more stringent erosion control and sediment discharge provisions reflecting current administrative practices, will be developed and adopted in the near future.

5. To prevent any further deterioration, such as pointed out in the "Ecological Survey" report, Environmental Impact Reports will be required for any project which may have an adverse effect on water quality, and appropriate mitigation measures will be required.

6. As more technical data is gathered by the water quality monitoring program being conducted by the Health Department, physical proposals will be developed for improvement of bay water quality (possibly including such projects as: improving bay hydraulics, treatment of inflows, and diversion of inflows).

7. The City will support the development of a model (physical, mathematical, or possibly both) of the Bay

and coastline which will provide additional insights as to the nature and extent of the water quality problem and will enable prediction of the effects of any single change on the entire system.

8. All street drainage systems and other physical improvements created by the City will be designed, constructed, and maintained in such a manner as to minimize adverse impacts on water quality. The possibility of diverting or treating street drainage will be investigated.

9. The City will support improvements in sewage treatment and the concept of reuse and recycling of sewage waters.

10. The City will continue to oppose oil drilling in the off-shore area, as discussed in Section 4 of this Element.

11. The City will encourage environmental awareness in the community through the school district, library department and contact with various civic and homeowners' associations.

12. The City will encourage continued participation of the Chamber of Commerce in cooperative programs among marine businesses for upgrading water quality, and assistance in terms of surveys, studies, and proposals related to water quality control.

13. The City will support regulations limiting or banning the use of insecticides, fertilizers, and other chemicals which are shown to be detrimental to water quality.

14. It shall be the policy of Newport Beach to take the lead in promoting the above-mentioned proposals to correct past deficiencies as well as to control future developments. Newport Beach will strengthen its own ordinances where necessary and will seek strict enforcement of such ordinances by provision of adequate staff and other necessary tools. Furthermore, all efforts will be made to initiate the action required by other governmental agencies.

15. The City will pursue the adoption of a joint powers agreement with Orange County which will delineate and clarify City and County responsibilities for the administration, management, and maintenance of the bay.

SECTION 2 - AIR QUALITY

Introduction

This Section of the Conservation of Natural Resources Element deals with the maintenance of air quality.

Air pollution is obviously a regional problem which has no respect for political divisions. While there are certain actions which can be taken locally, positive control of air pollution requires a coordinated program including Federal agencies, the State Government, and all general purpose governments and many of the special purpose districts in the air basin.

Current Sources and Levels of Air Pollution in Orange County

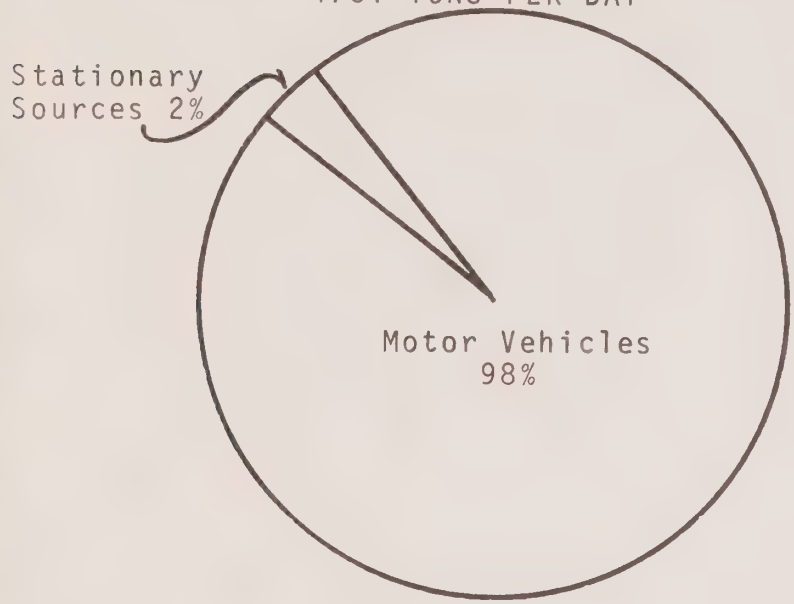
The following chart indicates the 1972 emissions and percentage contributions from all air pollution sources for all of Orange County. This chart clearly illustrates that motor vehicles are the major source of air pollution in Orange County.

EMISSIONS

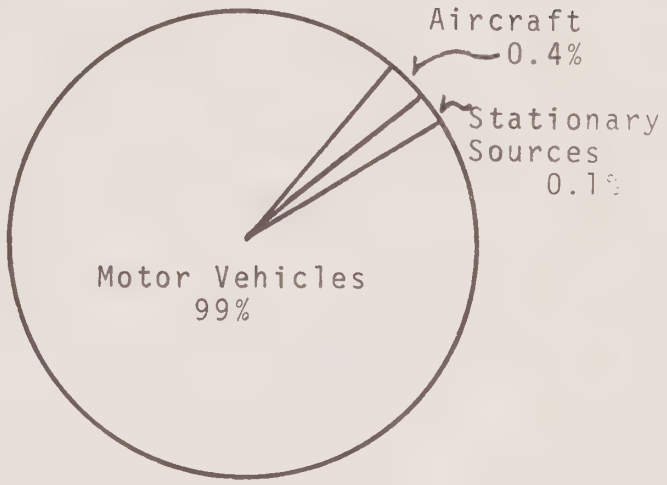
PERCENTAGE CONTRIBUTIONS FROM ALL SOURCES

1972

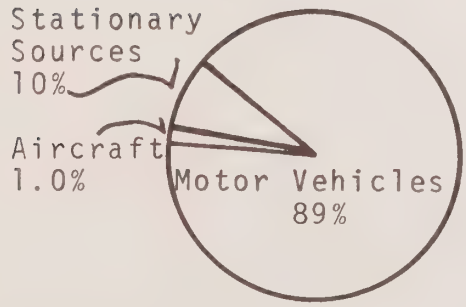
TOTAL TONNAGE OF ALL CONTAMINANTS
4731 TONS PER DAY



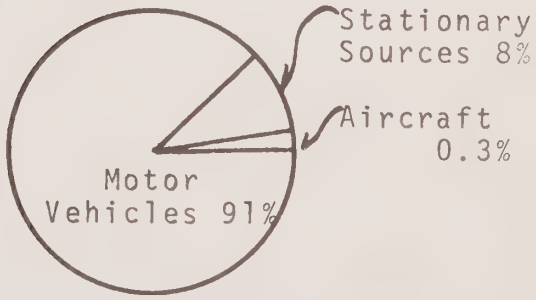
CARBON MONOXIDE
3914 TONS PER DAY



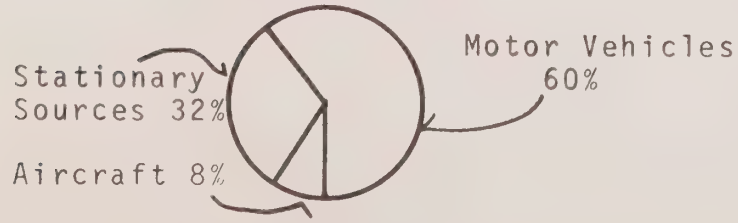
HYDROCARBONS
477 TONS PER DAY



OXIDES OF NITROGEN
295 TONS PER DAY



PARTICULATES
18 TONS PER DAY



OXIDES OF SULFUR
30 TONS PER DAY

SOURCE: Orange County Air Pollution Control District

Air Pollution Levels in Newport Beach

GENERAL AIR QUALITY

Due to the City's fortuitous location, Newport Beach suffers much less than the inland cities from air pollution. While no data are available on local Newport Beach levels of pollutants, the following chart does include readings taking in the City of Costa Mesa compared to other cities and the county as a whole (Newport Beach air pollutant readings should be as low as, or lower than, Costa Mesa readings):

AIR QUALITY 1972

DAYS CALIFORNIA STANDARD EXCEEDED, 1972

POLLUTANT	CALIFORNIA AIR QUALITY STANDARD	ANAHEIM	COSTA MESA	LA HABRA	LOS ALAMITOS	COUNTY* WIDE	REASONS FOR AIR QUALITY STANDARD	MAXIMUM** READING
Oxidant including Ozone	0.10ppm for 1 hr.	61	29	115	25	126	Prevention of eye irritation and possible impairment of lung function in persons with chronic pulmonary disease.	0.40ppm
Nitrogen Dioxide (NO_2)	0.25ppm for 1 hr.	6	4	7	5	14	Possible health effects should occur at slightly higher dosage. Produces atmospheric discoloration.	0.43ppm
Carbon Monoxide (CO)	10ppm avg. for 12 hrs.	17	12	49	14	62	Prevention of interference with oxygen transport by blood.	23ppm
	40ppm for 1 hr.	0	0	0	0	0		34ppm
Sulfur Dioxide (SO_2)	0.04 ppm avg. - 24 hrs.	0	0	2	6	8	Prevention of increase in chronic respiratory disease on long-term exposure	0.065ppm
	0.50ppm for 1 hr.	0	0	0	0	0		
Lead (Pb)	1.5 ug/m^3 30 day avg.	12 months	5 months	12 months	9 months	12 months	Higher levels have shown progressive increase in storage of lead in body.	6.0 ug/m^3
Suspended Particles	60 ug/m^3 annual geometric mean (AGM)	105 ug/m^3	67 ug/m^3	120 ug/m^3	85 ug/m^3	Avg. AGM 94ug/m^3	Long continued exposure may be associated with chronic respiratory disease. Exposure to a combination of suspended particles and sulfur dioxide may produce acute illness.	120 ug/m^3 352 ug/m^3

* This is number of days standard exceeded at one or more stations in Orange County.

** Highest reading averaged over period prescribed by air quality standard.

SOURCE: Orange County Air Pollution Control District

AIRCRAFT POLLUTANT EMISSION

Aircraft operations at Orange County Airport contribute air pollutants locally. The "Orange County Airport Impact Study" prepared by the consulting firm of Wilsey and Ham in 1972, under contract with the City, estimates that aircraft operations at Orange County Airport contribute over 15 tons of air pollutants per day. The consultant's report states:

> "Recognizing that this total amount of pollutants is a very small portion of the total air pollution from all sources, it still represents a serious impact to the citizens of Newport Beach. The fall-out pattern of these pollutants includes much of the City. Most of the particulate matter is emitted during takeoffs directly over the City in a relatively narrow path less than one-quarter mile wide. Land uses and features in this "fall-out area" consist chiefly of residences, schools, and Upper Newport Bay. The accumulative impact of particulate fall-out on residential neighborhoods is at best a dirty nuisance and at worst a potentially serious health hazard.
>
> "However, there is another important air pollution receiver--the Bay. Upper Newport Bay is one of the last remaining natural estuaries in Southern California....
>
> "Major increases in the number of jet aircraft over the Upper Newport Bay could impair the viability of the natural ecological balance for various forms of

wildlife and marine life.

"The effects of this accumulated pollution are difficult to evaluate scientifically. Certain observations have been made as a result of recent studies:

> 'The particulates associated with jet engine exhaust...tend to fall out more rapidly and therefore contribute more to local soiling problems than to area-wide visibility reduction.
>
> 'Sulfur oxides are the product of the combustion of fuel in jet engines as well as automobiles. Characteristically, the gas tends to stay close to where it is emitted on days of low ventilation, so accumulations in the vicinity of airports are to be expected.
>
> 'Finally, nitrogen oxides are formed by the oxidation of air, which is about 80% nitrogen, being introduced to promote combustion, when the combustion is at relatively high temperatures. High temperature combustion is a technique used to reduce levels of unburned hydrocarbons and particulates. This practice has the unfortunate side effect of increasing the amount of nitrogen oxides generated. The gas is a factor in the production of photo-chemical smog, reduces visibility when it is converted to nitrogen dioxide because of its brownish color, and at high concentrations produces adverse physiological reactions.'

"Air pollution toxicity is extremely important, however, due to possible long-range effects. A case in point is the ten-fold increase in emphysema in California in the past 15 years. Many medical scientists suspect that increasing air pollution of the last 20 to 30 years in California has been a major factor in this increase.

"Recent technological innovations, such as the 'burner

can' installations, show major reductions in emission of noxious visible pollutants. As much as 95% reduction is claimed for some installations. However, such mechanisms have an unknown effect upon harmful nonvisible pollutants such as carbon monoxide. Real relief is still only a future possibility at this point.

"Under these circumstances, we conclude that for the foreseeable future, the City must recognize a probable continuance of air pollution levels....near current output levels. The acceptability of such pollution caused by aircraft is an important factor in developing operational constraints for Orange County Airport."

NOXIOUS ODORS

An odor problem resulting from noxious gas seeps exists in the Balboa Coves area of West Newport. According to the "Balboa Coves Noxious Gas Project - Phase 3 Report" prepared by George P. Zebal and Associates, under contract with the City, the noxious gas seeps are of petroleum origin, resulting from chemical action in the oil-bearing marine sediments.

A gas scavenging and burn-off system was recently installed by the City in the Balboa Coves area, as proposed in the "Phase 3 Report."

An additional odor problem occasionally develops in the Newport Shores area of West Newport. According to the Orange County Air Pollution Control District, the major source of this odor problem appears to be associated with the oil production installations in the unincorporated area north and east of Newport Shores.

Current Air Pollution Programs and Regulations

STATIONARY SOURCES

The Orange County Air Pollution Control District enforces State and County regulations applying to stationary sources of air pollutants. Fundamental to the District's control program is the engineering permit system. Anyone wishing to build or install equipment which may cause air pollution, or which is intended to control it, must first submit plans and specifications to the District for approval. If the Engineering Division is satisfied after a thorough evaluation of the plans that the proposed equipment will comply with the District's requirements an Authority to Construct is issued. After construction is completed, the installation is observed in operation and tested to determine compliance with the District's standards. Only when full compliance has been tested is a final Permit to Operate granted with specific conditions to insure its continued proper operation. A constant surveillance is made of all permit holders and installations are visited periodically for inspections. The District secures compliance by detecting, investigating, and prosecuting violators of air pollution control laws. Three permanent air monitoring stations and one mobile station are maintained by the District.

MOBILE SOURCES

The control of motor vehicle emissions is the responsibility of the State and Federal Governments, and the reduction of emissions from this source will depend upon the effectiveness of the programs of the California Air Resources Board and the Federal Environmental Protection Agency.

Air Quality Proposals

Recognizing that air pollution is a regional problem but that the solution to this problem will require the support and cooperation of all of the local governments, the Newport Beach City Council adopted Resolution No. 7770 on July 24, 1972, which states:

> "WHEREAS, the likelihood of serious mortality from air pollution in California in the near future has become increasingly clear through newspaper reports and scientific studies; and
>
> "WHEREAS, although the degree of air pollution varies in intensity from district to district, there can be no doubt that even those cities relatively free from air pollution at this time will most surely be seriously affected as the pollution spreads; and
>
> "WHEREAS, the pattern of steady increase in air pollution from the 1940's to the present and the varying, sometimes ineffective, controls thus far implemented, point up the urgent need for immediate, strict and uniform air pollution control throughout the state, with the basic enforcement being the task of local and regional agencies; and
>
> "WHEREAS, the City of Newport Beach recognizes that the regional approach is the only way to meet the problem of imposing statewide air quality standards, and that cities should play their full role in developing effective machinery in order that state and/or federal governments will not be forced to intervene;
>
> "NOW, THEREFORE, BE IT RESOLVED that the City of Newport Beach hereby declares its intention to play its full role in policy formulation and planning with respect to strict control of air pollution, through close cooperation with the Orange County Board of Supervisors, and through participation in and maintenance of an efficient and effective County air pollution control district."

In addition the City will:

1. Pay particular attention to possible stationary sources of air pollution in the review of all Environmental Impact Reports.

2. Continue attempts to assure limitation of Orange County Airport operations.
3. Encourage development and use of emission reduction equipment for aircraft and automobile engines.
4. Pursue the development of alternative means of transportation which would reduce use of the automobile within the City.
5. Continue to oppose freeways which would bisect the community and which would bring increased through traffic with its attendant increase in air pollution emissions.
6. Continue to monitor the noxious gas odor problem in West Newport and periodically check on the effectiveness of the gas scavenging and burn-off system; additional corrective measures, if necessary, will be undertaken within economic and physical constaints.
7. Attempt to assure elimination of the oil production-associated odors in the Newport Shores area through cooperation with the Orange County Air Pollution Control District.
8. Re-evaluate City policies to include the purchase of lower weight or horsepower or lower emission vehicles whener feasible.

SECTION 3 - BEACH EROSION

Introduction

Broad, sandy beaches form a major part of the Newport Beach image and are among the City's most valuable natural resources. The conservation of these beaches requires more than merely keeping them free of development; a major section of the ocean beach in West Newport (westerly of the Newport Pier) periodically experiences considerable erosion, which, if allowed to continue unchecked, would result in a total loss of this section of sandy beach and destruction of many beach-front homes.

Background

In 1934, a major storm hit Newport Beach. The storm raised one home off its foundation and felled a total of four homes; one of them dashed on the beach a half mile away. Twenty feet of beach were carved away in one day, with the waves undermining railroad tracks all along the peninsula. In 1939, 15-foot to 25-foot waves destroyed Balboa and Newport Piers, depositing their remains on Seal Beach. Since that time Newport Beach experienced more ocean storms and was plagued with the serious and costly problem of beach erosion.

Detritus, which is carried by streams in flood flow, constitutes the main source of supply of sands to the ocean beach. Newport Beach's principal source of sand supply is the Santa Ana River (in fact, West Newport and the Balboa Peninsula are a "sand spit" created by the Santa Ana River before its mouth was relocated. The natural supply of sand to the ocean beach has practically been eliminated as the result of extensive impervious areas resulting from urbanization;

the construction of flood control dams, channels and storm drains; the construction of water storage reservoirs; and programs of soil conservation.

By 1958 it appeared as though natural processes of erosion had been halted. New erosion problems arose in 1965, although this time it was due to the unfortunate addition of tropical storm currents to the combination of normal littoral drift, California currents, and inshore currents. The heavy surf and the combination of these four currents scoured the sand from the beach and moved it upcoast. The U.S. Army Corps of Engineers began a multiple-stage project for restoration and protection of the shoreline in 1967.

In February 1968, the placement of 494,000 cubic yards of sand on the beach between 32nd and 50th Streets at Newport Beach and the construction of an experimental 258-foot steel sheet-pile groin at 40th Street were completed. In November 1968, 240,000 cubic yards of sand were added in the upcoast area, and the construction of a 190-foot steel sheet-pile groin at 44th Street and a 60-foot steel sheet-pile groin at 48th Street were completed.

The construction of four rubblemound groins and the placement of 750,000 cubic yards of sand on the Newport Beach area was started in 1969. The groin work, completed in November 1969, comprised rebuilding the steel sheet-pile groin at 48th Street with rubblemound construction to a length of 340 feet, and constructing groins at 36th, 52nd and 56th Streets with lengths of 490, 340, and 570 feet, respectively. Sand fill was obtained from the Santa Ana River Channel as part of a flood

control channel restoration project.

In 1972, as the most recent stage of the project, stone groins were constructed at 28th and 30th Streets to lengths of 600 and 540 feet, respectively. The steel sheet-pile groins at 40th and 44th Streets were rehabilitated with rubblemound construction and were extended to lengths of 480 and 470 feet, respectively. A total of 321,000 cubic yards of sand was imported from borrow sites located on the Balboa Peninsula and near the mouth of the Santa Ana River. In addition, 37,000 cubic yards of silty material from the earlier river channel restoration project were removed from the beach surface and replaced with clean beach sand.

The Corps of Engineers has plans to construct a rubblemound groin at 62nd Street and to extend the downcoast jetty of the Santa Ana River in the event a need for these structures is demonstrated by a continued surveillance of beach conditions. Groin construction would be supplemented with imported sandfill as required.

Proposals

The Corps of Engineers groin construction project in West Newport is part of a larger shoreline protection program for about 15 miles of beach frontage extending from the U.S. Naval Weapons Station north of Surfside-Sunset Beach to the Newport Harbor entrance. Because of the complexity of the shore processes in this area, it is impossible to predict the long-range consequences of the Corps' shoreline protection project without the use of "modeling" techniques.

The City of Newport Beach will continue to monitor the effects of the groin construction project, with the cooperation

of the Corps of Engineers and County and State agencies. If it becomes apparent that major adverse effects are resulting from the groins, the City will endeavor to have modifications accomplished as may be necessary to mitigate the adverse effects.

The City of Newport Beach will also support the development of a model of the Orange County shoreline so that all alternative shoreline protection strategies can be adequately tested for their long-range effects, and so that the optimum shoreline protection system can be identified and developed.

SECTION 4 - MINERAL RESOURCES

Introduction

Oil deposits constitute the only significant extractable mineral resource in the Newport Beach planning area. Currently, oil companies are operating oil extraction wells in the West Newport area, for the most part in the unincorporated "County Island" north of the Newport Shores neighborhood.

Current Regulations

Both the City and the State have regulations affecting oil extraction in the Newport Beach planning area.

The original Charter for the City of Newport Beach, adopted in 1955, specifically prohibited additional drilling for oil within the City limits, except for "slant drilling" in a limited area of West Newport which was initiated under a lease with the City negotiated in 1943.

Section 20.52.010 of the Newport Beach Municipal Code also prohibits the extraction of oil in all areas of the City except the section in West Newport where slant drilling (with drilling and pumping sites outside the city limits) is permitted under the 1943 lease. Section 20.52.020 of the Municipal Code requires a vote of the citizens prior to any expansion of the area where slant drilling is permitted.

In order to protect the coastline from adverse aesthetic effects, and the potential adverse ecological effects of an oil leak, the State Shell-Cunningham Act of 1955 (Section 6871.2 of the Public Resources Code) was enacted. This Act prohibits oil extraction on all State tide and submerged lands from the

northerly city limits of Newport Beach to the Mexican border. There is one exception in this Act which would allow oil exploration and drilling in the event that oil deposits under State tide and submerged lands are being drained by oil wells on adjacent lands, such as in the ocean area beyond the city (3 mile) limit.

Although federal legislation which would prohibit oil extraction in federal waters has been proposed, none of these bills were passed by Congress. The City of Newport Beach has actively supported such federal legislation.

Proposals

The City of Newport Beach will: 1) continue to prohibit additional oil extraction activities within the City limits, 2) continue to support the Shell-Cunningham Act, and 3) oppose oil extraction in the federal waters.

This position may be modified at some future date should the need for oil become extremely critical, but only if it can be proven that oil extraction can be accomplished with no adverse aesthetic effects and no potential ecological consequences from such occurrences as oil leaks, noxious odors, and ground subsidence.

SECTION 5 - ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES

Introduction

This section of the Conservation of Natural Resources Element deals with the scientific resources which have been, and which may be, discovered in the undeveloped portions of the City.

Known Archaeological and Paleontological Sites

Even though the area has not been extensively studied, well over thirty (30) archaeological sites have been discovered and recorded in Newport Beach; most of these are adjacent to and around the Upper Bay. These sites are on record with the Archaeological Survey Office at UCLA.

The majority of the known archaeological sites have already been destroyed by development; roads, housing, and other building activities. There are, however, several important sites which remain intact.

The importance of the archaeological values within the City boundaries has been accentuated by recent discoveries which indicate that this area may contain important prehistoric remains. Prehistoric remains of man have been definitely dated as far back as 8,000 to 10,000 years; there are indications that man may have inhabited the area as far back as 20,000 years. A discovery was announced just this summer which revealed that the art of modelling, decorating, and firing clay objects occurred in this area 6,000 to 8,000 years ago; this predates any such discovery in both North and South America.

Archaeologists have, through excavation, established that at least two and possibly three distinct cultural groups inhabited the area. Late sites indicate that the City of Newport

area was heavily populated at the time of Spanish contact.

Sites vary in size, content, and depth. Through proper archaeological excavation, the historical and cultural information offered by these remains is obtained.

The City also contains unique paleontological localities, especially along the bluffs of the east shore of the bay and the adjoining foothills. One site, Fossil Canyon, was discovered in the North Bluffs Area; the extent of this deposit has yet to be determined. Known vertebrate deposits within the City boundaries are considered to be among the most important in the entire State.

Archaeological and paleontological resources are irreplaceable and nonrenewable. Once a site is destroyed, it is lost forever.

Proposals

In order to encourage the identification, preservation, and cataloging of archaeological and paleontological sites, the City of Newport Beach will:

1. Attempt to establish an on-going inventory of all sites within the City boundaries which would be utilized by the Community Development Department.

2. Request the property owners in each of the large undeveloped sites to conduct scientific surveys of the property prior to any development or earth-moving activities.

3. Notify Archaeological Research, Inc. (ARI) and appropriate academic institutions prior to any large scale improvements on undeveloped publicly-owned property to determine if any scientific resources exist.

4. Explore the possibility of establishing a museum for archaeological and paleontological objects found in Newport Beach. This museum could be a part of the "Nature Education Center" which may be developed with the Upper Bay Flora and Fauna Reserve,

or a part of the cultural center proposed in Newport Center. The possibility of recreating one of the early Indian places of habitation should be considered.

6. Encourage the preservation of one or more archaeological-paleontological sites to be used as an educational resource and preserve.

SECTION 6 - ENERGY CONSERVATION

Introduction

In order to reduce demand for energy, which will in turn reduce the adverse effects of air and thermal pollution and extend the life expectency of current reserves, the City of Newport Beach will enact an energy policy.

Proposals

There are many areas in which the City will participate in the conservation of energy, such as:

1. City will upgrade building codes to require high grade insulation and weather sealing materials to cut both heating and cooling costs for all new structures within the jurisdiction of Newport Beach.

2. Set policies for all city buildings to conserve energy.

3. Encourage architectural standards which take advantage of natural heat and light sources.

4. Encourage business, industry, and the residential community to adopt and/or practice conservation techniques.

5. Study traffic patterns and speed limits based on consideration of fuel conservation.